Unit 1 Recap.md 9/15/2022

Unit 1 Recap

Key Takeaways

- All Java programs are contained in a class.
- Within each class, there can exist a main method. The main method is the entry point of a Java program. If you want to know how a Java program works, look at the main method.
- The main method is one of many static methods which can be part of a Java class.
- There are three types of common errors in Java: compilier/syntax error, correctness error, and runtime error
- Humans write Java files such as HelloWorld.java. The Java Compilier compiles Java files into class files ending in ".class" such as HelloWorld.class
- When solving any problem that seems complex, intimidating, or large, break the problem down into smaller and smaller pieces. By solving the smaller problems, you can take those results of the smaller problems and use it to construct the solution to the original, larger problem. This is the problem solving technique of decomposition which we use to help develop our algorithmic thinking skills

Parting Thoughts

Unit 1 gives us a good introduction to the Java programming language and environment. More importantly, we developed our algorithmic thinking skills through the study and use of decomposition. Armed only with the Java programming concepts of println statements and static methods but with the more important problem solving skill of decomposition, we can solve somewhat difficult problems such as Shining or ShiningPart2.

In Unit 2, we will build upon our foundation by learning about different data types, variables, loops, and managing complexity.